

### **DETAILED ACTION**

1. This action is in response to the RCE amendment filed on 4/16/2008.
2. As per applicant's request, claims 1, 8, 15, and 22 have been amended and claims 3, 10, 17, and 24 have been canceled. Claims 1, 2, 4-9, 11-16, 18-23, and 25-28 are pending in the application.

#### ***Double Patenting***

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-28 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-44 of copending Application No. 10/730,897 hereafter '897. Although the conflicting claims are not identical, they are not patentably distinct from each other because they are directed to substantially the same invention and recites only obvious differences which would have been obvious to one of ordinary skill in the art of program development at the time of invention such as simply (i) omitting/adding steps or elements along with their functions, and/or (ii) implementing a system, product, tuning tool having computer program for performing the method steps.

The following example is given:

Per claim 1:

The copending application '897 claims:

*A method of tuning an application deployed in an application server, ("A method of tuning an application deployed in an application server, comprising the steps of," claim 1)*

*deploying the application in the application server; ("deploying the application in the application serve," claim 1);*

*invoking an application tuning server-side component operable to retrieve information relating to parameters of the deployed application that are to be tuned ("invoking an application tuning tool to display an interface including displays of current values of application parameters and measurements of performance of the application," claim 1)*

*current values of parameters of the deployed application that are to be tuned and measurements of performance of the application (claim 3)*

*receiving specifications of values of application tuning parameters ("receiving specifications of values of application tuning parameter," claim 1);*

*and tuning the deployed application using the received specified parameter values by modifying the values...application ("tuning the application using the received specified parameter value," claim 1);*

*displaying a measurement of an effect of the...application performance in real time ("display an interface including displays of current values of application parameters and measurements of performance of the application, claim 1).*

The instant claim does not explicitly recite the interface displays emphasize importance of a particular parameter over another parameter as recited in co-pending claim 1.

However, it would have been obvious for one of ordinary skill in the art of program development at the time the instant invention was made to modify the co-pending method by omitting the step of emphasizing importance of a particular parameter over another parameter recited in co-pending claim 1 for the purpose of expediting the method.

This is a provisional obviousness-type double patenting rejection.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1, 2, 4, 8, 9, 11, 15, 16, 18, 22, 23, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dumarot et al. (US patent. RE38865) hereafter “Dumarot” in view of Arquie et al. (US 7,219,300) hereafter Arquie.

Per claim 1:

Dumarot discloses:

-tuning an application deployed in an application server (i.e. “*adjust system or application parameters in order to optimize the operation of the application*,” col. 7, lines 1-25; col. 6 lines 20-26; “an optimization process 300 that the *local computer 12 or server 130 uses to optimize software applications* 138 and system response or utilization, or to provide

recommendations 480... the optimizer 136 gathers relevant system information including: operating system 150 version and release data, installed hardware components, hardware configuration, and software configurations (col. 5, lines 34-41);

-deploying the application in the application server; (i.e. “*program application performance on a computer system* ... configuration information and performance capabilities based on characteristics of the program/system ...the configuration information and the performance capabilities are used to optimize configuration parameters of the program applications so as to enhance the performance of the workstation in running the program system,” col. 3 lines 40-52)

-invoking an application tuning server-side component operable to retrieve information relating to parameters of the deployed application that are to be tuned (i.e. “The optimization database table ...*the optimizer program*...on the local computer and/or the remote computer. The optimizer program *contains or accesses* a dynamic monitor 137 of system and application activity...*particular settings of the application* that may affect application performance,” col. 4, lines 43-59; “the optimizer 136 gathers relevant system information...the optimizer may query the current CPU use, memory use, or other activity,” col. 5, lines 37-59)

- current values of parameters of the deployed application that are to be tuned and measurements of performance of the application (i.e. “ the optimizer may query the current CPU use, memory use, or other activity,” col. 5, lines56-59; “control various parameters 420, associated with a particular application name,” col. 5 lines 41-55).

-receiving specifications of values of application tuning parameters (i.e. “*The optimizer program* 136 may contain a graphical user interface 139, used to

*specify settings or provide information to the user.*(col. 4, lines 55-58)

-and tuning the deployed application using the received specified parameter values (i.e. “the optimizer … can *adjust the following parameter settings* …to adjust performance,” col. 6 lines 9-26)

- modifying the values of the parameters being used by the deployed application; and displaying a measurement of an effect of the modification of the values of the parameters of the deployed application on system and application performance (i.e. “The optimizer icon may change colors when the rule …has a beneficial effect,” col. 9 lines 40-43; “graphically depicted as cutouts…to help give users a graphical…indication of the placement,” col. 9 lines 20-25; “disk space is low,” col. 7 lines 26-36; “control dynamic settings,” col. 5 lines 31-33; “the optimizer … can *adjust the following parameter settings* …to adjust performance,” col. 6 lines 9-26).

Dumarot does not explicitly teach that the displaying is performed in real time. However, Arquie teaches it was known in the pertinent art, at the time applicant's invention was made, “to show real time performance information (i.e. col. 14 lines 33-41, 15-26).” It would have been obvious for one having ordinary skill in the art to modify Dumarot's disclosed system to incorporate the teachings of Arquie. The modification would be obvious because one having ordinary skill in the art would be motivated to provide real time updated performance information (col. 14 lines 15-26) as suggested by Arquie.

Per claim 2:

Dumarot further discloses:

-wherein the step of invoking the application tuning server-side component is performed in response to an action by an administrator, engineer, or user of the application server (i.e. “user-specified preferences,” col. 3, lines 15-20; the user may enter text or data ... that specifies a level of optimization ...application settings,” col. 6 lines 9-20).

Per claim 4:

Dumarot further discloses:

-wherein the application tuning server-side component is operable to accept input from the administrator, engineer, or user to specify values of the parameters of the deployed application that are to be tuned (i.e. “user-specified preferences,” col. 3, lines 15-20; the user may enter text or data ... that specifies a level of optimization ...application settings,” col. 6 lines 9-20).

Per claims 8, 9, and 11, they are the system versions of claims 1, 2, and 4, respectively, and are rejected for the same reasons set forth in connection with the rejection of claims 1, 2, and 4 above.

Per claims 15, 16, and 18, they are the product versions of claims 1, 2, and 4, respectively, and are rejected for the same reasons set forth in connection with the rejection of claims 1, 2, and 4 above.

Per claims 22, 23, and 25, they are the application component versions of claims 1, 2, and 4, respectively, and are rejected for the same reasons set forth in connection with the rejection of claims 1, 2, and 4 above.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 5, 6, 12, 13, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dumarot et al. (US patent. RE38865) hereafter “Dumarot,” in view of Arquie et al. (US 7,219,300) hereafter Arquie, and further in view of Applicant's Admitted Prior Art (hereinafter referred to as “APA”) disclosed in the instant application.

Per claim 5:

Dumarot discloses adjusting application parameters for optimal performance (i.e. col. 7, lines 1-25; col. 6 lines 20-26) but Dumarot and Arquie do not explicitly teach that the values of application parameters comprise at least one of: Database Connection Pool size, Thread Pool Size, HTTP connection pool size, HTTP incoming connection queue length, HTTP Socket timeout, Session pool size, and Java Virtual Machine tuning parameters. However, APA teaches tuning such configuration parameters were known in the pertinent art, at the time applicant's invention was made, to minimize response time or maximize throughput etc (“modification of multiple configuration parameters such as thread pool size, connection pool size, transaction timeout period, various Java Virtual Machine...parameters,” page 1). It would have been obvious for one having ordinary skill in the art to modify Dumarot and Arquie's disclosed

system to incorporate the teachings of APA. The modification would be obvious because one having ordinary skill in the art would be motivated to optimize performance by tuning configuration parameters such as thread pool size (page, lines 19-21) as suggested by APA.

Per claim 6:

APA further discloses:

wherein the measurements of performance of the application comprise at least one of: Overall transactions per second, Average Request Time, HTTP transactions per second, Database connections used, HTTP connections used, Active thread count, Overall throughput, Database throughput, HTTP throughput (i.e. “application performance is typically measured in terms of response time, transactions per second, throughput etc,” page 1, lines 13-18).

Per claims 12 and 13, they are the system versions of claims 5 and 6, respectively, and are rejected for the same reasons set forth in connection with the rejection of claims 5 and 6 above.

Per claims 19 and 20, they are the product versions of claims 5 and 6, respectively, and are rejected for the same reasons set forth in connection with the rejection of claims 5 and 6 above.

9. Claims 7, 14, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dumarot et al. (US patent. RE38865) hereafter “Dumarot,” in view of Arquie et al. (US 7,219,300) hereafter Arquie, further in view of Applicant’s Admitted Prior Art (hereinafter

referred to as “APA”) disclosed in the instant application, and still further in view of Bowker (“Superior app management with JMX,” JavaWorld, 6/8/2001).

Per claim 7:

Dumarot, Arquie, and APA do not explicitly disclose that the application tuning server-side component is implemented using Java Management Extensions. However, Bowker teaches JMX was known in the pertinent art, at the time applicant's invention was made, to enable to “query the configuration settings and change them during runtime (i.e. page 1, lines 1-4). It would have been obvious for one having ordinary skill in the art to modify the disclosed system of Dumarot in view of Arquie and APA to incorporate the teachings of Bowker. The modification would be obvious because one having ordinary skill in the art would be motivated to create a consistent approach to managing applications in real time (i.e. page 1, lines 1-4) as suggested by Bowker.

Per claim 14, it is the system version of claim 7, respectively, and is rejected for the same reasons set forth in connection with the rejection of claim 7 above.

Per claim 21, it is the product version of claim 7, respectively, and is rejected for the same reasons set forth in connection with the rejection of claim 7 above.

10. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dumarot et al. (US patent. RE38865) hereafter “Dumarot,” in view of Arquie et al. (US 7,219,300) hereafter Arquie, and further in view of Bowker (“Superior app management with JMX,” JavaWorld, 6/8/2001).

Per claim 26:

Dumarot disclose an optimizer tuning configuration parameters but Dumarot and Arquie do not explicitly discloses that the optimizer is implemented using Java Management Extensions. However, Bowker teaches JMX was known in the pertinent art, at the time applicant's invention was made, to enable to "query the configuration settings and change them during runtime (i.e. page 1, lines 1-4). It would have been obvious for one having ordinary skill in the art to modify the disclosed system of Dumarot and Arquie to incorporate the teachings of Bowker. The modification would be obvious because one having ordinary skill in the art would be motivated to create a consistent approach to managing applications in real time (i.e. page 1, lines 1-4) as suggested by Bowker.

11. Claims 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dumarot et al. (US patent. RE38865) hereafter "Dumarot," in view of Arquie et al. (US 7,219,300) hereafter Arquie, and further in view of Bowker ("Superior app management with JMX," JavaWorld, 6/8/2001), and still further in view of Applicant's Admitted Prior Art (hereinafter referred to as "APA") disclosed in the instant application.

Per claim 27:

Dumarot discloses adjusting application parameters for optimal performance (i.e. col. 7, lines 1-25; col. 6 lines 20-26) and Bowker discloses a configuration management tool of any application server, JMX (page 1, lines 1-4) but Dumarot, Arquie, and Bowker do not explicitly

teach that the values of application parameters comprise at least one of: Database Connection Pool size, Thread Pool Size, HTTP connection pool size, HTTP incoming connection queue length, HTTP Socket timeout, Session pool size, and Java Virtual Machine tuning parameters. However, APA teaches tuning such configuration parameters were known in the pertinent art, at the time applicant's invention was made, to minimize response time or maximize throughput etc ("modification of multiple configuration parameters such as thread pool size, connection pool size, transaction timeout period, various Java Virtual Machine...parameters," page 1). It would have been obvious for one having ordinary skill in the art to modify the systems of Dumarot, Arquie, and Bowker to incorporate the teachings of APA. The modification would be obvious because one having ordinary skill in the art would be motivated to optimize performance by tuning configuration parameters such as thread pool size (page, lines 19-21) as suggested by APA.

Per claim 28:

APA further discloses:

wherein the measurements of performance of the application comprise at least one of: Overall transactions per second, Average Request Time, HTTP transactions per second, Database connections used, HTTP connections used, Active thread count, Overall throughput, Database throughput, HTTP throughput (i.e. "application performance is typically measured in terms of response time, transactions per second, throughput etc," page 1, lines 13-18).

***Response to Arguments***

12. Applicant's arguments with respect to claims 1, 2, 4-9, 11-16, 18-23, and 25-28 have been considered but are moot in view of the new ground(s) of rejection.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to INSUN KANG whose telephone number is (571)272-3724. The examiner can normally be reached on M-R 7:30-6 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lewis A. Bullock, Jr. can be reached on 571-272-3759. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Insun Kang/  
Examiner, Art Unit 2193